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The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 20

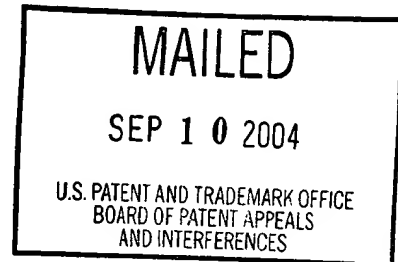
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

**Ex parte** GEORGE WILLIAM WILHELM

Appeal No. 2003-1030  
Application No. 08/820,181

ON BRIEF



Before FLEMING, DIXON, and BARRY, **Administrative Patent Judges**.  
DIXON, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1-8.  
The examiner has indicated that independent claim 8 is allowable over the prior art of record.

We **AFFIRM-IN-PART**.

## BACKGROUND

Appellant's invention relates to a stationary queue for scarce resource management. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below.

1. A multi-tasking operating system for managing simultaneous access to scarce or serially re-usable resources by multiple process threads, comprising:

at least one resource;

a plurality of threads requesting access to said resource; and

a stationary queue for allocating access to said resource amongst said threads one-by-one in order of request.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Davidson et al. (Davidson)	5,630,136	May 13, 1997
Periwal et al. (Periwal)	5,644,768	Jul. 1, 1997

Claims 1-7 stand rejected under 35 U.S.C. § 103 as being unpatentable over Davidson in view of Periwal.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellant regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 11, mailed Jan. 2, 2002) for the examiner's reasoning in support of

the rejections, and to appellant's brief (Paper No. 10, filed Sep. 26, 2001) and reply brief (Paper No. 12, filed Mar. 13, 2002) for appellant's arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we make the determinations which follow.

We note that appellant has elected to group the claims into four separate groupings (now three since claim 8 has been indicated as allowable). Therefore, we will address appellant's argument with respect to a representative claim from each grouping. (37 CFR 1.192.)

### CLAIM 1

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. **See In re Rijckaert**, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A *prima facie* case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. **See In re Lintner**, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the

claimed subject matter is ***prima facie*** obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. **See In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. **See In re Warner**, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), **cert. denied**, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. **See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.**, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in art would lead that individual to combine the relevant teachings of the references.'" **In re Lee**,

277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing **In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence.'" **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." **Dembiczak**, 175 F.3d at 999, 50 USPQ2d at 1617, citing **McElmurry v. Arkansas Power & Light Co.**, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Further, as pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." **In re Hiniker Co.**, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Therefore, we look to the limitations set forth in independent claim 1.

Here, we find that the language of independent claim 1 requires "A multi-tasking operating system for managing simultaneous access to scarce or serially re-usable resources by multiple process threads, comprising at least one resource, a plurality of threads requesting access to said resource; and a stationary queue for allocating access to said resource amongst said threads one-by-one in order of request." The examiner maintains that Davidson teaches all the limitations except for the stationary queue and the examiner relies upon the teachings of Periwai with respect to the use of

mutex to order the access to a shared resource between a plurality of threads. (Answer at pages 3-4.)

Appellant argues that both Davidson and Periwai do not teach appellant's "fairness." (Brief at page 8.) Appellant further argues that the serializing of Davidson does not teach appellant's "fair" or "FIFO" order or "next. . . in line" order. This argument is not persuasive since it is not commensurate with the scope of the language of independent claim 1 which requires "one-by-one in order of request" which we find to be taught by Periwai. We find that the use the mutex and release of the mutex to the "next waiting thread or process acquires the mutex and proceeds with its processing" (Periwai at column 4, lines 3-5) teaches the one-by-one in order of request since the claim does not further limit the order of the requests or that the order is stored so as to assure the order is maintained. Additionally, we find that Periwai teaches that the "next sleeping thread may be awakened and granted the mutex." (Periwai at column 11, lines 56-58.) Therefore, we find that Periwai teaches maintaining some sort of order so as to awaken the next tread in a sequence or order.

Appellant argues the order is not defined with the mutex of Periwai and therefore does not assure fair order. (Brief at pages 9-10.) As stated above, we do not find that claim 1 requires "fair order" and do not find that fair order is necessarily FIFO order since many factors may dictate fairness in a wide range of systems. Therefore, this argument is not persuasive. Appellant argues that Davidson teaches the use of an OS

based system where the order of acquisition is undefined which causes thrashing and that Periwal does not teach fair or FIFO ordering of threads. (Brief at pages 10-11.) Appellant further argues that both Davidson and Periwal fail to teach anything about "enforcing order in the system." (Brief at pages 11-13.) We do not find this argument to be commensurate with the scope of independent claim 1 since we find no limitation to enforcing or assuring any order which is preset or stored. Therefore, this argument is not persuasive. We have reviewed the copies of emails that appellant has attached to the brief, but do not find these excerpts to be persuasive since no corresponding discussion of the generalized teachings of Periwal have been made of record and no discussion of the specifics of the language of independent claim 1 have been made by appellant with respect to these teachings. Therefore, this argument is not persuasive.

Appellant traverses the examiner's comments concerning the "stationary queue" and that the "stationary queue" is described in the specification. (Brief at page 14.) While we find a discussion of the "stationary queue" in the specification, we do not find an explicit definition which would require reading the structure or acts into independent claim 1. Therefore, we interpret this limitation using its ordinary meaning.

As our reviewing court states, "[t]he terms used in the claims bear a 'heavy presumption' that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." **Texas Digital Sys.,**

**Inc. v. Telegenix, Inc.**, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002) **cert. denied**. 123 S.Ct. 2230 (2003). Moreover, the intrinsic record also must be examined in every case to determine whether the presumption of ordinary and customary meaning is rebutted. Indeed, the intrinsic record may show that the specification uses the words in a manner clearly inconsistent with the ordinary meaning reflected, for example, in a dictionary definition. In such a case, the inconsistent dictionary definition must be rejected. [Citation omitted.] ("[A] common meaning, such as one expressed in a relevant dictionary, that flies in the face of the patent disclosure is undeserving of fealty."); **Liebscher v. Boothroyd**, 258 F.2d 948, 951, 119 USPQ 133, 135 (CCPA 1958) ("Indiscriminate reliance on definitions found in dictionaries can often produce absurd results."). In short, the presumption in favor of a dictionary definition will be overcome where the patentee, acting as his or her own lexicographer, has clearly set forth an explicit definition of the term different from its ordinary meaning. [Citations omitted.] Further, the presumption also will be rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope. **See Teleflex**, 299 F.3d at 1324, 63 USPQ2d at 1380. **Texas Digital Sys., Inc v. Telegenix, Inc.**, 308 F.3d at 1204, 64 USPQ2d at 1819.



Appellant argues that the stationary queue is not a queue in the normal use of the term queue, but rather a structure which presents a queue-like behavior without being a queue. Appellant argues that the invention achieves queue like behavior (first-come, first served) without the use of a real queue. (Brief at pages 14-15.) We do not find that this argument is persuasive since a queue need not be FIFO order, therefore this argument is not commensurate with the scope of independent claim 1. (**See also** answer at page 13.) Therefore, this argument is not persuasive.

Appellant argues that claim 1 is appellant's broadest claim and its patentability rests on the argument that a stationary queue which is used to assure fair order is not taught by either Davidson, Periwai or their combination. (Brief at page 16.) As discussed above, we do not find that independent claim 1 requires an assurance of fair order. Therefore, this argument is not persuasive.

Appellant reiterates similar arguments in the reply brief which we do not find persuasive above, and we do not find that appellant has rebutted or shown error in the ***prima facie*** case of obviousness. Therefore, we will sustain the rejection of independent claim 1.

## **CLAIM 2**

Appellant argues that Periwai does not provide for FIFO order. (Brief at page 16.) We do not find that the examiner has addressed or identified a teaching of a FIFO

order in either Davidson or Periwal. Therefore, we find that the examiner has not established a ***prima facie*** case of obviousness. The examiner disputes appellant's usage of the term FIFO with respect to appellant's disclosure at page 10 of the answer, but does not address this explicit limitation in either the rejection or the arguments and we find no express teaching in either reference with respect to FIFO order. Therefore, we cannot sustain the rejection of independent claim 2 and its dependent claim 3.

#### **CLAIM 4**

Appellant argues that independent claim 4 recites that a thread is awakened as granted access to a resource in fair order. (Brief at page 17.) While appellant recites "fair order" in independent claim 4, we find no express definition of that limitation that would require this to be in a FIFO order as with independent claim 2 and as discussed above, we find that "fair" may have differing interpretation for different systems. Therefore, this argument is not persuasive, and we will sustain the rejection of independent claim 4 and claims 5-7 which appellant has elected to group therewith.

#### **CONCLUSION**

To summarize, the decision of the examiner to reject claims 1 and 3-7 under 35 U.S.C. § 103 is affirmed, and the decision of the examiner to reject claim 2 under 35 U.S.C. § 103 is reversed.


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No time period for taking any subsequent action in connection with this appeal  
may be extended under 37 CFR § 1.136(a).

**AFFIRM-IN-PART**

  
MICHAEL R. FLEMING  
Administrative Patent Judge

  
JOSEPH L. DIXON  
Administrative Patent Judge

  
LANCE LEONARD BARRY  
Administrative Patent Judge

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